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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,750	10/31/2003	John A. Devos	200310702-1	3212
22879 7590 01/24/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER ABDULSELAM, ABBAS I	
			ART UNIT 2629	PAPER NUMBER
			NOTIFICATION DATE 01/24/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/698,750	<b>Applicant(s)</b> DEVOS ET AL.	
	<b>Examiner</b> Abbas I. Abdulsalam	<b>Art Unit</b> 2629	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-19 is/are allowed.
- 6) ☒ Claim(s) 1-7, 11-14 and 20-60 is/are rejected.
- 7) ☒ Claim(s) 8-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/31/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-7, 11-14, and 51-57 are rejected under 35 U.S.C. 102(e) as being anticipated by Ezumi (USPN 7197329).

Regarding claims 1 and 51-52, Ezumi teaches a display comprising (*Fig. 1*): a plurality of display modules interlockable to form the display (*see display 111, and a display section 101 in Fig. 1*), each display module comprising: at least one user-viewable display element disposed in the display module, each of a plurality of pixels of the display corresponding to at least one of the display elements(*Fig. 1 (101, 111), col. 6, lines 57, col. 6, line 59, display section 101 composed of a color LCD, a cordless telephone also includes a display 111*); at least one connector (*130*) disposed in the display module to at least one of receive power from and provide power to a first adjacent display module(*a wire communication line (130), note that it is inherent the wired communication line is plugged into a power source*); and, at least one receptor (*104*) disposed in the display module and receptive to a connector of a second adjacent display module(*col. 6, lines 55-56, the master unit antenna 104 is used for wireless*

*communication through a slave unit 110, note that as shown in Fig. 1, the master unit 100 includes a display section 101 and the slave unit 110 includes a display 111).*

Regarding claim 2, Ezumi teaches one of the plurality of display modules is a master display module and other of the plurality of display modules are slave display modules, the master display module communicating display information to each of the slave display modules that the at least one display element of the slave display module is to display (*col. 6, lines 52-61*).

Regarding claims 3-4, Ezumi teaches the master display module determines a configuration of each slave display module relative to other of the plurality of display modules, to determine the display information to be communicated to the slave display module that the at least one display element of the slave display module is to display (*Fig. 4 (211), col. 6, lines 52-61, col. 8, lines 32-39*).

Regarding claim 5, Ezumi teaches display information is communicated to each of the plurality of display modules, each display module determining which of the display information the at least one display element of the display module is to display (*Fig. 5A (S9, S11), col. 10, lines 16-26*).

Regarding claims 6-7 and 53-57, Ezumi teaches each display module automatically self-determines a configuration of the display module relative to other of the plurality of display modules, to determine which of the display information the at least one display element of the

display module is to display (*Fig. 4 (211), col. 6, lines 52-61, col. 8, lines 32-39, Fig. 5A (S9, S11), col. 10, lines 16-26*).

Regarding claims 11-14, Ezumi teaches at least one of the plurality of display modules are hot pluggable, such that the at least one display module are disconnectable from and connectable to other of the plurality of display modules while power is being provided to the plurality of display displays (*Fig. 1 (110, 100, 130), see fig. 1 including display 111, a display section 101 and a wire communication line (130) such that a wire communication line (130), is inherently plugged into a power source*).

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 20-50 and 58-60 rejected under 35 U.S.C. 103(a) as being unpatentable over Ezumi (USPN 7197329) in view of Asano (USPN 6636181).

Regarding claims 20, 27, 38 and 58, Ezumi teaches a display comprising: a plurality of display modules interlockable to form the display (*see display 111, and a display section 101 in Fig. 1*), each display module having a front, at least one first side, and at least one second side, and comprising (*see Fig. 1 which includes a slave unit 110 and a master unit 100*): at least one

display element viewable from the front of the display module, each of a plurality of pixels of the display corresponding to at least one of the display elements(*Fig. 1 (101, 111), col. 6, lines 57, col. 6, line 59, display section 101 composed of a color LCD, a cordless telephone also includes a display 111*);

*While Ezumi teaches a wire communication line (130), and discloses the master unit antenna 104 is used for wireless communication through a slave unit 110 as shown in Fig. 1,*

Ezumi does not teach *at least two connectors* mounted on the first sides of the display module to at least one of receive power from and provide power to first adjacent display modules; and, *at least two receptors* mounted on the second sides of the display module and receptive to connectors of second adjacent display modules.

*Asano (USPN 6636181) on the other hand teaches as shown in Fig. 17, an auxiliary antenna 201, which may be disposed around the antenna of a portable telephone 200 to radiate radio waves to external via an external antenna 202 coupled to the auxiliary antenna 201 via a signal cable 203.*

*Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Ezumi's wireless communication apparatus (cordless telephone) shown in Fig. 1 with Asano's auxiliary antenna (201) along with an external antenna (201) with a signal cable 203 as configured in Fig. 17, because the use of an auxiliary antenna (201) with an external antenna (201) helps function a portable telephone (Cellular Phone) 200 as taught by Asano.*

Regarding claims 21 and 28, Ezumi teaches one of the plurality of display modules is a master display module and other of the plurality of display modules are slave display modules, the master display module communicating display information to each of the slave display modules that the at least one display element of the slave display module is to display (*col. 6, lines 52-61*). .

Regarding claim 22, Ezumi teaches display information is communicated to each of the plurality of display modules, each display module determining which of the display information the at least one display element of the display module is to display (*Fig. 5A (S9, S11), col. 10, lines 16-26*).

Regarding claim 23, Asano teaches display information conveying information to be displayed by the at least one display element of each display module is superimposed over power signals communicated among the plurality of display modules via the at least two connectors of each display module (*Fig. 17 (200, 201, 202, 203)*).

Regarding claim 24-25, Ezumi teaches each display module further comprises a radio frequency (RF) transmitter and/or receiver to send and/or receive display information to be displayed by the at least one display element of the display module (*Fig. 1 (104, 113), col. 6, lines 52-61, col.5, lines 59-63*)

Regarding claim 26, Ezumi teaches at least one of the plurality of display modules are hot pluggable, such that the at least one display module are disconnectable from and connectable to other of the plurality of display modules while power is being provided to the plurality of display displays(*Fig. 1 (110, 100, 130), see fig. 1 including display 111, a display section 101 and a wire communication line (130) such that a wire communication line (130), is inherently plugged into a power source*).

Regarding claims 29 and 32, Ezumi teaches the display module is a master display module to communicate the display information to each of other display modules of the multiple-display module display to be displayed by the other display module (*col. 6, lines 52-61*).

Regarding claims 30-31, Ezumi teaches the display module determines a configuration of each display module of the multiple-display module display (*Fig. 4 (211), col. 6, lines 52-61, col. 8, lines 32-39*).

Regarding claims 33-34, Asano teaches the display information is superimposed over power signals on the at least two connectors (*Fig. 17 (200, 201, 202, 203)*).



Regarding claim 35, Ezumi teaches the communication mechanism is one of: a radio frequency (RF) receiver and an optical receive (*Fig. 1 (113, 104)*).

Regarding claims 36 and 48-49, Ezumi teaches a control mechanism to at least automatically self-determine a configuration of the display module relative to other display modules of the multiple-display module display(*Fig. 4 (211), col. 6, lines 52-61, col. 8, lines 32-39, Fig. 5A (S9, S11), col. 10, lines 16-26*).

Regarding claim 37, Ezumi teaches the housing is rectangular in shape (*Fig. 1 (100, 110)*).

Regarding claims 39-42 and 59-60, Ezumi teaches the display information source conveys the display information to a designated display module of the plurality of display modules. (*Fig. 4 (211), col. 6, lines 52-61, col. 8, lines 32-39, Fig. 5A (S9, S11), col. 10, lines 16-26*).

Regarding claims 43-47, Asano teaches the display information is conveyed among the plurality of display modules over power signals communicated among the plurality of display modules via the at least two connectors of each display module (*Fig. 17 (200, 201, 202, 203)*).

Regarding claim 50, Ezumi teaches at least one of the plurality of display modules are hot pluggable, such that the at least one display module are disconnectable from and connectable to other of the plurality of display modules while power is being provided to the plurality of display

modules(*Fig. 1 (110, 100, 130), see fig. 1 including display 111, a display section 101 and a wire communication line (130) such that a wire communication line (130), is inherently plugged into a power source*).

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following arts are cited for further reference.

U.S. Pat. No. 7,099,662 to Fuengeld

U.S. Pat. No. 6,972,732 to Nishikawa

### *Allowable Subject Matter*

6. Claims 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 15-19 are allowed.

8. The following is an examiner's statement of reasons for allowance:

Regarding claim 15, Neither Ezumi nor Asano teaches a display comprising: a plurality of display modules interlockable to form the display, each display module comprising: at least one user-viewable display element disposed in the display module, each of a plurality of pixels of the display corresponding to at least one of the display elements; at least one connector

disposed in the display module to at least one of receive power from and provide power to a first adjacent display module; at least one receptor disposed in the display module and receptive to a connector of a second adjacent display module; and, **a power mechanism to partially self-power the display module, such that remaining power needed by the display module is received from other of the plurality of display modules.**

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abbas I. Abdulsalam whose telephone number is 571-272-7685. The examiner can normally be reached on Monday through Friday from 9:00A.M. to 5:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

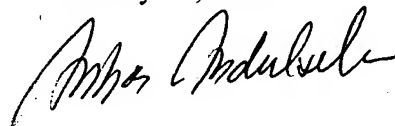
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abbas I Abdulsalam  
Examiner  
Art Unit 2629  
January 12, 2008

A handwritten signature in black ink, appearing to read 'Abbas I Abdulsalam', written in a cursive style.